SEQUENCE LISTING

<110> Fischer, Robert L.
Mizukami, Yukiko
The Regents of the University of California

<120> Methods for Altering Organ Mass, Controlling Fertility and Enhancing Asexual Reproduction in Plants

<130> 023070-090720US

<140> US 09/479,855
<141> 2000-01-07

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<170> PatentIn Ver. 2.1

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Arg Ser Asp Gly Ser Leu Cys Leu Met Glu Ala Leu Asn Arg Ser Ser
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His Ser Asn His His Gln Asp Ser Ser Pro Lys Val Glu Asp Phe Phe
105                 110                 115                 120

ggg acc cat cac aac aac aca agt cac aaa gaa gcc atg gat ctt agc   676
Gly Thr His His Asn Asn Thr Ser His Lys Glu Ala Met Asp Leu Ser
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tta gat agt tta ttc tac aac acc act cat gag ccc aac acg act aca   724
Leu Asp Ser Leu Phe Tyr Asn Thr Thr His Glu Pro Asn Thr Thr Thr
            140                 145                 150

aac ttt caa gag ttc ttt agc ttc cct caa acc aga aac cat gag gaa   772
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gaa act aga aat tac ggg aat gac cct agt ttg aca cat gga ggg tct   820
Glu Thr Arg Asn Tyr Gly Asn Asp Pro Ser Leu Thr His Gly Gly Ser
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atg agc cct ggg tca caa tct agc tgc atc act ggc tct cac cac cac   916
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His Thr Asn Phe Ser Ala Glu Asn Tyr Gln Lys Glu Ile Glu Asp Met
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Ser Gly Phe Ser Arg Gly Ala Ser Ile Tyr Arg Gly Val Thr Arg His
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His Gln His Gly Arg Trp Gln Ala Arg Ile Gly Arg Val Ala Gly Asn
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gct tac gat gta gca gca att aag ttc cgt ggc aca aat gct gtg act   1588
Ala Tyr Asp Val Ala Ala Ile Lys Phe Arg Gly Thr Asn Ala Val Thr
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Asn Phe Asp Ile Thr Arg Tyr Asp Val Asp Arg Ile Met Ser Ser Asn
                445                 450                 455

aca ctc ttg tct gga gag tta gcg cga agg aac aac aac agc att gtc   1684
Thr Leu Leu Ser Gly Glu Leu Ala Arg Arg Asn Asn Asn Ser Ile Val
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gtc agg aat act gaa gac caa acc gct cta aat gct gtt gtg gaa ggt   1732
Val Arg Asn Thr Glu Asp Gln Thr Ala Leu Asn Ala Val Val Glu Gly
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ggt tcc aac aaa gaa gtc agt act ccc gag aga ctc ttg agt ttt ccg   1780
Gly Ser Asn Lys Glu Val Ser Thr Pro Glu Arg Leu Leu Ser Phe Pro
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gcg att ttc gcg ttg cct caa gtt aat caa aag atg ttc gga tca aat   1828
Ala Ile Phe Ala Leu Pro Gln Val Asn Gln Lys Met Phe Gly Ser Asn
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atg ggc gga aat atg agt cct tgg aca tca aac cct aat gct gag ctt   1876
Met Gly Gly Asn Met Ser Pro Trp Thr Ser Asn Pro Asn Ala Glu Leu
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aag acc gtc gct ctt act ttg cct cag atg ccg gtt ttc gct gct tgg   1924
Lys Thr Val Ala Leu Thr Leu Pro Gln Met Pro Val Phe Ala Ala Trp
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Cys Ile Thr Gly Ser His His His Gln Gln Asn Gln Asn Gln Asn His
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ggg ttc tcg ttg tct tca aat atg ttg aaa atg ggt ggt gga gaa gct   96
Gly Phe Ser Leu Ser Ser Asn Met Leu Lys Met Gly Gly Gly Glu Ala
             20                  25                  30

ctt tac tca tct tcg tcg tct tca gtt gca act tct tct gtt cca cca   144
Leu Tyr Ser Ser Ser Ser Ser Ser Val Ala Thr Ser Ser Val Pro Pro
         35                  40                  45

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Gln Leu Val Val Gly Asp Asn Ser Ser Asn Tyr Gly Val Cys Tyr Gly
     50                  55                  60

tct aac tta gca gct agg gaa atg tat tct caa atg tct gtg atg ccc   240
Ser Asn Leu Ala Ala Arg Glu Met Tyr Ser Gln Met Ser Val Met Pro
 65                  70                  75                  80

ctc aga tct gac ggt tct ctt tgc tta atg gaa gct ctc aac aga tct   288
Leu Arg Ser Asp Gly Ser Leu Cys Leu Met Glu Ala Leu Asn Arg Ser
                 85                  90                  95

tct cac tcg aat aat cat cac cat agt caa gtt tca tct cca aag atg   336
Ser His Ser Asn Asn His His His Ser Gln Val Ser Ser Pro Lys Met
            100                 105                 110

gaa gat ttc ttt ggg acc cat cat cac aac aca agt cac aaa gaa gcc   384
Glu Asp Phe Phe Gly Thr His His His Asn Thr Ser His Lys Glu Ala
        115                 120                 125

atg gat ctt agc tta gat agt tta ttc tac aat acc act cat gcg cca   432
Met Asp Leu Ser Leu Asp Ser Leu Phe Tyr Asn Thr Thr His Ala Pro
    130                 135                 140

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Asn Asn Asn Thr Asn Phe Gln Glu Phe Phe Ser Phe Pro Gln Thr Arg
145                 150                 155                 160

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Asn His His Glu Glu Glu Thr Arg Asn Tyr Glu Asn Asp Pro Gly Leu
                165                 170                 175

aca cat gga gga ggg tct ttt aat gta ggg gta tat ggg gaa ttt caa   576
Thr His Gly Gly Gly Ser Phe Asn Val Gly Val Tyr Gly Glu Phe Gln
            180                 185                 190

cag tca ctg agc ttg tcc atg agc cct ggg tca caa tct agc tgc atc   624
Gln Ser Leu Ser Leu Ser Met Ser Pro Gly Ser Gln Ser Ser Cys Ile
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    210                 215                 220
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                245                 250                 255

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            260                 265                 270

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        275                 280                 285

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Glu Ala His Leu Trp Asp Asn Ser Phe Lys Lys Glu Gly His Ser Arg
    290                 295                 300

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305                 310                 315                 320

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Ala Arg Ala Tyr Asp Leu Ala Ala Leu Lys Tyr Trp Gly Pro Ser Thr
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cac act aat ttc tct gtg gag aat tat cag aaa gag att gat gac atg  1056
His Thr Asn Phe Ser Val Glu Asn Tyr Gln Lys Glu Ile Asp Asp Met
            340                 345                 350

aag aac atg act cga caa gaa tat gtt gct cac ttg aga aga aaa acc  1104
Lys Asn Met Thr Arg Gln Glu Tyr Val Ala His Leu Arg Arg Lys Thr
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His Gln His Gly Arg Trp Gln Ala Arg Ile Gly Arg Val Ala Gly Asn
385                 390                 395                 400

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gcc tat gat gta gca gct atc aag ttc cgt ggc aca aac gcg gtg act  1296
Ala Tyr Asp Val Ala Ala Ile Lys Phe Arg Gly Thr Asn Ala Val Thr
            420                 425                 430

aac ttt gac ata aca agg tac gat gtt gat cgc ata atg gct agt aac  1344
Asn Phe Asp Ile Thr Arg Tyr Asp Val Asp Arg Ile Met Ala Ser Asn
        435                 440                 445

act ctc ttg tct gga gag atg gct cga agg aac agc aac agc atc gtg  1392
Thr Leu Leu Ser Gly Glu Met Ala Arg Arg Asn Ser Asn Ser Ile Val
    450                 455                 460
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gtc cgc aac att agc gac gag gaa gcc gct tta acc gct gtc gtg aac   1440
Val Arg Asn Ile Ser Asp Glu Glu Ala Ala Leu Thr Ala Val Val Asn
465                 470                 475                 480

ggt ggt tcc aat aag gaa gtg ggt agc ccg gag agg gtt ttg agt ttt   1488
Gly Gly Ser Asn Lys Glu Val Gly Ser Pro Glu Arg Val Leu Ser Phe
                485                 490                 495

ccg acg ata ttt gcg ttg cct caa gtt ggt ccg aag atg ttc gga gca   1536
Pro Thr Ile Phe Ala Leu Pro Gln Val Gly Pro Lys Met Phe Gly Ala
            500                 505                 510

aat gtg gtc gga aat atg agt tct tgg act acg aac cct aat gct gat   1584
Asn Val Val Gly Asn Met Ser Ser Trp Thr Thr Asn Pro Asn Ala Asp
        515                 520                 525

ctc aag acc gtt tct ctt act ctg ccg cag atg ccg gtt ttc gct gcg   1632
Leu Lys Thr Val Ser Leu Thr Leu Pro Gln Met Pro Val Phe Ala Ala
    530                 535                 540

tgg gct gat tct taa ttcaatctaa tggctaactc tggttttctt ggtttagggt   1687
Trp Ala Asp Ser
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ccaagtgttt aagtttatct ccgggtttat ccggtttgaa ctacaattcg g          1738
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<213> Brassica napus
<223> canola AINTEGUMENTA (ANT)

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Gly Phe Ser Leu Ser Ser Asn Met Leu Lys Met Gly Gly Gly Glu Ala
             20                  25                  30
Leu Tyr Ser Ser Ser Ser Ser Ser Val Ala Thr Ser Ser Val Pro Pro
         35                  40                  45
Gln Leu Val Val Gly Asp Asn Ser Ser Asn Tyr Gly Val Cys Tyr Gly
     50                  55                  60
Ser Asn Leu Ala Ala Arg Glu Met Tyr Ser Gln Met Ser Val Met Pro
 65                  70                  75                  80
Leu Arg Ser Asp Gly Ser Leu Cys Leu Met Glu Ala Leu Asn Arg Ser
                 85                  90                  95
Ser His Ser Asn Asn His His His Ser Gln Val Ser Ser Pro Lys Met
            100                 105                 110
Glu Asp Phe Phe Gly Thr His His His Asn Thr Ser His Lys Glu Ala
        115                 120                 125
Met Asp Leu Ser Leu Asp Ser Leu Phe Tyr Asn Thr Thr His Ala Pro
    130                 135                 140
Asn Asn Asn Thr Asn Phe Gln Glu Phe Phe Ser Phe Pro Gln Thr Arg
145                 150                 155                 160
Asn His His Glu Glu Glu Thr Arg Asn Tyr Glu Asn Asp Pro Gly Leu
                165                 170                 175
Thr His Gly Gly Gly Ser Phe Asn Val Gly Val Tyr Gly Glu Phe Gln
            180                 185                 190
Gln Ser Leu Ser Leu Ser Met Ser Pro Gly Ser Gln Ser Ser Cys Ile
        195                 200                 205
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Thr Ala Ser His His His Gln Asn Gln Thr Gln Asn His Gln Gln Ile
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Ser Glu Ala Leu Val Glu Thr Ser Ala Gly Phe Glu Thr Thr Thr Met
225                 230                 235                 240
Ala Ala Ala Ala Ala Lys Lys Lys Arg Gly Gln Glu Val Val Val Gly
                245                 250                 255
Gln Lys Gln Ile Val His Arg Lys Ser Ile Asp Thr Phe Gly Gln Arg
            260                 265                 270
Thr Ser Gln Tyr Arg Gly Val Thr Arg His Arg Trp Thr Gly Arg Tyr
        275                 280                 285
Glu Ala His Leu Trp Asp Asn Ser Phe Lys Lys Glu Gly His Ser Arg
    290                 295                 300
Lys Gly Arg Gln Val Tyr Leu Gly Gly Tyr Asp Met Glu Glu Lys Ala
305                 310                 315                 320
Ala Arg Ala Tyr Asp Leu Ala Ala Leu Lys Tyr Trp Gly Pro Ser Thr
                325                 330                 335
His Thr Asn Phe Ser Val Glu Asn Tyr Gln Lys Glu Ile Asp Asp Met
            340                 345                 350
Lys Asn Met Thr Arg Gln Glu Tyr Val Ala His Leu Arg Arg Lys Thr
        355                 360                 365
Ser Gly Phe Ser Arg Gly Ala Ser Ile Tyr Arg Gly Val Thr Arg His
    370                 375                 380
His Gln His Gly Arg Trp Gln Ala Arg Ile Gly Arg Val Ala Gly Asn
385                 390                 395                 400
Lys Asp Leu Tyr Leu Gly Thr Phe Gly Thr Gln Glu Glu Ala Ala Glu
                405                 410                 415
Ala Tyr Asp Val Ala Ala Ile Lys Phe Arg Gly Thr Asn Ala Val Thr
            420                 425                 430
Asn Phe Asp Ile Thr Arg Tyr Asp Val Asp Arg Ile Met Ala Ser Asn
        435                 440                 445
Thr Leu Leu Ser Gly Glu Met Ala Arg Arg Asn Ser Asn Ser Ile Val
    450                 455                 460
Val Arg Asn Ile Ser Asp Glu Glu Ala Ala Leu Thr Ala Val Val Asn
465                 470                 475                 480
Gly Gly Ser Asn Lys Glu Val Gly Ser Pro Glu Arg Val Leu Ser Phe
                485                 490                 495
Pro Thr Ile Phe Ala Leu Pro Gln Val Gly Pro Lys Met Phe Gly Ala
            500                 505                 510
Asn Val Val Gly Asn Met Ser Ser Trp Thr Thr Asn Pro Asn Ala Asp
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Trp Ala Asp Ser
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